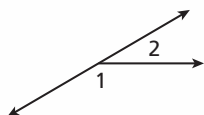


Attendance Problems

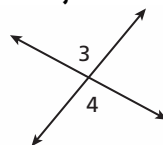
Term	Definition
1. ____ Angle	A. A straight path that has no thickness and extends forever. B. A figure formed by two rays with a common endpoint. C. A flat surface that has no thickness and extends forever. D. A part of a line between two points. E. Names a location and has no size. F. A point that divides a segment into two congruent segments.
2. ____ Line	
3. ____ Midpoint	
4. ____ Plane	
5. ____ Segment	

Select the best description for each labeled angle pair.

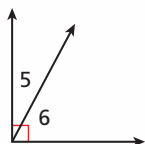
6. Linear pair or vertical angles.



7. Adjacent angles or vertical angles



h. Supplementary or complementary angles.



Tell if each number is a natural number, a whole number, an integer, or a rational number. Give all the names that apply.

9. 6

10. 5.2

11. $\frac{3}{8}$

Tell if each number is a natural number, a whole number, an integer, or a rational number. Give all the names that apply.

12. -3

13. 0

Give an example of each of the following.

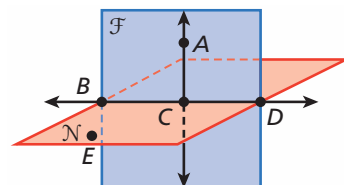
14. A point

15. A line

16. A ray

17. A segment

18. A plane



Solve the following.

19. $\frac{z}{5} = 5$

20. $8.4 = -1.2r$

- I can use inductive reasoning to identify patterns and make conjectures.
- I can find counterexamples to disprove conjectures.

Common Core

CC.9-12.G.CO.9 Prove theorems about lines and angles.

CC.9-12.G.CO.10 Prove theorems about triangles.

CC.9-12.G.CO.11 Prove theorems about parallelograms.

CC.9-12.G.SRT.4 Prove theorems about triangles.

Refer to example 1 page 74.

21. Guided Practice: Find the next item in the pattern 0.4, 0.04, 0.004, ...

22. What is inductive reasoning?

23. What is a conjecture?

Refer to example 2 on pages 74 and 75.

24. Guided Practice: Complete the conjecture: The product of two odd numbers is ? .

Refer to example 3 on page 75.

25. Make a conjecture about the lengths of male and female whales based on the data.

Average Whale Lengths						
Length of Female (ft)	49	51	50	48	51	47
Length of Male (ft)	47	45	44	46	48	48

To show that a conjecture is always true, you must prove it.

26. What is a counterexample?

Inductive Reasoning

1. Look for a pattern.
2. Make a conjecture.
3. Prove the conjecture or find a counterexample.

Refer to example 4 on page 76.

Guided Practice: Show that the conjecture is false by finding a counterexample.

27. For any real number x , $x^2 \geq x$.

28. Supplementary angles are adjacent.

29. The radius of every planet in the solar system is less than 50,000 km.

Planets' Diameters (km)							
Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune
4880	12,100	12,800	6790	143,000	121,000	51,100	49,500

2.1 Assignment (pp 77-78) 12-18 even, 24, 26, 32.

